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**Name of Organization:** Michigan Technological University GEM Center

**Type of Organization:** College or University

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**Project Title:** Keweenaw Peninsula Sustainable Future Forum

**Project Category:** Habitat (Ecological) Protection and Rest

**Rank by Organization (if applicable):** 0

**Total Funding Requested (\$):** 83,242 **Project Duration:** 1 Years

**Abstract:**

A partnership of ten community, business, tribal, environmental, and educational organizations will create a Keweenaw Peninsula Sustainable Future Forum, comprised of diverse stakeholders. The Forum--through a steering committee, task forces, a project coordinator, and a consultant--will focus on building a dynamic framework to promote and coordinate sustainable development initiatives in the region. The goal will be to move toward a regional sustainable development plan. Project activities will create a clearinghouse for socioeconomic, environmental, and cultural information on the Keweenaw Peninsula (including a Web site and geographic information system), establish a suite of regional sustainability indicators, conduct biodiversity and sustainable business field trips, and work with landowners to map areas of high biodiversity and critical habitat using global positioning system (GPS) and GIS tools.

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**Geographic Areas Affected by the Project**

**States:**

<input type="checkbox"/> Illinois	<input type="checkbox"/> New York
<input type="checkbox"/> Indiana	<input type="checkbox"/> Pennsylvania
<input checked="" type="checkbox"/> Michigan	<input type="checkbox"/> Wisconsin
<input type="checkbox"/> Minnesota	<input type="checkbox"/> Ohio

**Lakes:**

<input checked="" type="checkbox"/> Superior	<input type="checkbox"/> Erie
<input type="checkbox"/> Huron	<input type="checkbox"/> Ontario
<input type="checkbox"/> Michigan	<input type="checkbox"/> All Lakes

**Geographic Initiatives:**

<input type="checkbox"/> Greater Chicago	<input type="checkbox"/> NE Ohio	<input type="checkbox"/> NW Indiana	<input type="checkbox"/> SE Michigan	<input type="checkbox"/> Lake St. Clair
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**Primary Affected Area of Concern:** Torch Lake, MI

**Other Affected Areas of Concern:**

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***For Habitat Projects Only:***

**Primary Affected Biodiversity Investment Area:** Keweenaw Peninsula

**Other Affected Biodiversity Investment Areas:**

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**Problem Statement:**

The Keweenaw Peninsula's rich assemblage of isolated relic species and endemics, including globally rare (G2, G3, G4) examples, has earned it designation as a SOLEC Biodiversity Investment Area. Plant elements of Cordilleran (western mountain zones), Pacific Coast, and Arctic (northern boreal) regions are found on the peninsula, particularly along the shoreline. Many of the boreal species reach the southern extent of their range on the Keweenaw. Five sites have very high biodiversity significance and three sites have high significance, according to the Michigan Natural Features Inventory. Many other sites of moderate significance have been identified on the northeastern tip of the peninsula. The peninsula is also an important flyway for migrating raptors and a stopover site for neo-tropical migrants.

Very little of the Keweenaw Peninsula is protected by virtue of ownership. The Nature Conservancy and Michigan Nature Association own a combined 2,100 acres of bedrock beach shoreline near the tip of the peninsula. Two Michigan Audubon Society sanctuaries add 720 inland acres. Ft. Wilkins and McLain State Parks, and several small county parks are also set aside from development, but are not necessarily actively maintained for the preservation of natural habitat. Some suffer from overuse. Only a few small disjunct segments of state forest are present. Large private landowners with forest-products or mining interests own most of the land. Second homes or camps occupy small shoreline tracts. While landowners appreciate scenic vistas, most are unaware of rare habitat that may also be present. Thus, most of the peninsula is not managed for biodiversity protection.

Land that was historically in commercial timber is being rapidly subdivided into second-home lots. Sand beach areas are particularly vulnerable to development because of their rarity and appeal to potential buyers. The northernmost sand dunes in the state lie along the Keweenaw shore at Great Sand Bay. Several sand beaches adjoin large wetlands, including one of the highest quality Great Lake marsh communities found on the entire Lake Superior shoreline.

In addition to its natural biodiversity, the Keweenaw is home to a philosophically and socioeconomically diverse human population. Not surprisingly, given the region's independent spirit and strong support for property rights, only 14 of the 37 local units of government in Keweenaw, Houghton, and Baraga Counties have planning commissions. Only a few of them are active. There is no coordinated regional planning. Yet, 95 percent of the 1,936 respondents to a 1997 Houghton County "Shaping Our Future" survey agree (80 percent agree strongly) that long-range planning is needed, and 97 percent feel that neighboring government units should work together toward shared goals.

At public meetings about land use, many people "want things to stay as they are," not acknowledging that change is inevitable. In recent years, however, strip and shoreline development have led many residents to fear that the area is becoming "Anywhere USA," with all its attendant problems. The idea of managed growth is gaining support. Yet, many people also voice the need for more "living wage" job opportunities.

Past confrontations between environmental groups and promoters of business expansion have created an atmosphere of suspicion and polarization. The groups need better communication in order to improve mutual understanding and find common ground, a process that will take time and active nurturing. Participants in increasingly well-attended land-use meetings and workshops over the past three years have indicated their desire to be part of a planning process to protect the natural and cultural heritage of the region, but the effort needs to be coordinated and ongoing.

#### **Proposed Work Outcome:**

A partnership of ten community, business, tribal, environmental, and educational organizations will create a Keweenaw Peninsula Sustainable Future Forum (KPSFF), comprised of diverse stakeholders. Several of the partners have worked together previously to cosponsor public meetings, workshops, and a survey on land-use planning issues. Those efforts, mainly funded by mini-grants, were helpful in raising awareness and interest. Last November, representatives from the Les Cheneaux Economic Forum shared their experiences with more than 100 Keweenaw-area residents, a very good turnout for any public meeting here. Many attendees felt that a similar process can and should be established for the Keweenaw.

The Keweenaw Peninsula Sustainable Future Forum will focus on building a dynamic framework to promote and coordinate sustainable development initiatives in the region. The goal will be to move toward a regional sustainable development plan. The overall structure of the KPSFF will be similar to that of Les Cheneaux but will be modified to account for the larger and more complex geographic and political landscape in the Keweenaw. For example, the Les Cheneaux Economic Forum represents one township with two relatively homogeneous communities. The KPSFF's stakeholders will come from three counties, a tribal community, and 34 townships, cities, and villages that have some distinct differences from one another. Les Cheneaux is both jumpstarting and controlling economic development. Here, we are farther along the path of economic development, so that managing growth is of greater concern.

Like the Les Cheneaux Economic Forum, the KPSFF will consist of a steering committee and a number of task forces, based on interests and concerns and representing a broad range of stakeholders. A project coordinator from the GEM Center for Science and Environmental Outreach at Michigan Technological University and a community and economic development consultant from Michigan State University Extension will assist the steering committee and task forces. A "Common Ground" workshop this April, funded by a mini-grant to the Keweenaw Land Trust and Keweenaw Industrial Council, will invite potential KPSFF steering committee and task force members to begin a dialogue on sustainability issues. The KPSFF coordinator will help plan the workshop, and the KPSFF consultant will facilitate.

The task forces, each with at least one representative on the steering committee, will meet regularly to discuss and prioritize concerns and propose actions or projects, some of which can be carried out as part of this project. Others may require additional funding. Establishing a framework to link and coordinate individual projects will result in greater progress toward sustainable development and better prospects of obtaining the necessary funding and support.

Proposed project activities will create a clearinghouse for socioeconomic, environmental, and cultural information on the Keweenaw Peninsula (including a Web site and geographic information system), establish a suite of regional sustainability indicators, conduct biodiversity and sustainable business field trips, and work with landowners to map areas of high biodiversity and critical habitat using global positioning system (GPS) and GIS tools.

It is important that the participants in this project have a common knowledge base to help them understand the socioeconomic challenges faced by local governments and businesses, as well as the environmental community's concerns about protecting areas of significant biodiversity and critical habitat. A wealth of information is available on these subjects, but it needs to be compiled and presented so that people can understand it without being overwhelmed. For example, the project coordinator will generate maps with ArcView geographic information system software to illustrate social, economic, and environmental trends in the region and to compare them to other areas. Much of the relevant data is already being gathered by the Michigan Tech GEM Center as part of a sustainability indicators project for the Lake Superior Work Group of the Lake Superior Binational Program. The data can readily be evaluated and customized for the needs of the KPSFF. This background information and updates on the Forum's progress will be made available to the public at a "report to the community" meeting, on the Internet, through the news media, and in public displays, such as county fair booths. In addition, the results of numerous studies and surveys will be catalogued into a library for use by the Forum.

The biodiversity and sustainable business field trips will be a valuable opportunity for stakeholders to gain first-hand

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knowledge and appreciation of important natural and human resources in the area. A good local example is a well-attended field trip conducted last fall by a fledgling watershed council. The trip introduced area residents to some of the problems facing the watershed and efforts to correct or manage them. The KPSFF biodiversity field trips will help landowners recognize and appreciate the habitats on their own land. In a related effort the following spring, project staff and volunteers from such groups as The Nature Conservancy, Keweenaw Land Trust, Master Gardeners, and Copper Country Audubon Club will meet, either individually or in small groups, with interested owners of land likely to contain high biodiversity. The meetings will help the landowners identify and manage important habitats on their land, while increasing the known occurrences of rare habitats or species. With landowner permission, these areas can be mapped using GPS and GIS, along with areas in public ownership that have not been mapped for biotic diversity. Youth interns to assist these activities will be recruited from the Keweenaw Community Foundation Youth Advisory Committee, high school ecology clubs, and 4-H groups.

In order to track progress toward sustainability, many communities are developing indicators that can serve as a guide to the KPSFF for selecting a set of indicators relevant to the Keweenaw. The indicators include measures of human well-being (social, economic, cultural, aesthetic, health) as well as the quality of the natural environment. Indicators developed by SOLEC '98, the Lake Superior Binational Program (Ecosystem Principles and Objectives, Indicators and Targets for Lake Superior), and the International Joint Commission Indicators Implementation Task Force will be discussed. The partner organizations will consult resources such as EPA's Community-based Environmental Protection, the "This Place Called Home: Tools for Sustainable Communities" CD-ROM, and numerous sustainability-related Internet sites.

The Forum can't be expected to create a sustainable development plan in one year, but it can make strides toward establishing a framework and process to move toward a plan. This project will be evaluated by the number of Forum participants, public meeting attendance, media coverage (including letters to the editor), spin-off projects by task forces or the steering committee, funds leveraged from other sources, and hits/comments on the Web site.

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**Project Milestones:****Dates:**

Project start and organizational meeting	09/2000
Biodiversity and business field trips	10/2000
Initial task force meetings	11/2000
Forum Web site launched	01/2001
"Report to the Community" public meeting	03/2001
Meetings with landowners	05/2001
Project report and evaluation	08/2001
Project End	08/2001

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☒ Project Addresses Environmental Justice

**If So, Description of How:**

Keweenaw Bay Indian Community is one of the Sustainable Future Forum partners. Habitats for plants and animals of traditional importance to Native Americans are an important component of the region's biodiversity to be preserved. The project will assess socioeconomic conditions within the Keweenaw Peninsula region and compare them with the U.S., Michigan, and the remainder of the Lake Superior watershed. The project partners recognize that preservation of biotic diversity must go hand-in-hand with addressing basic social and economic challenges.

☒ Project Addresses Education/Outreach

**If So, Description of How:**

The project will include creation of a Web site, resource library, and GIS maps and displays that will convey information to the public and encourage feedback. Biodiversity and sustainable business field trips will educate stakeholders. Task force members will meet with landowners in high biodiversity areas either individually or in small groups to discuss the project, answer questions, and invite participation. We will also display and distribute posters and other educational materials, developed by the Michigan Association of Conservation Districts and the Great Lakes Indian Fish & Wildlife Commission, on native and invasive exotic plants.

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**Project Budget:**

	<b>Federal Share Requested (\$)</b>	<b>Applicant's Share (\$)</b>
<b>Personnel:</b>	32,400	0
<b>Fringe:</b>	13,432	0
<b>Travel:</b>	3,000	0
<b>Equipment:</b>	0	0
<b>Supplies:</b>	1,500	500
<b>Contracts:</b>	13,700	0
<b>Construction:</b>	0	0
<b>Other:</b>	0	0
<b>Total Direct Costs:</b>	64,032	500
<b>Indirect Costs:</b>	19,210	11,120
<b>Total:</b>	83,242	11,620
<b>Projected Income:</b>	0	0

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**Funding by Other Organizations (Names, Amounts, Description of Commitments):**

The following organizations will commit in-kind staff or volunteer time to the steering committee or task forces, biodiversity or business field trips, landowner meetings, or other in-kind services, as indicated:

Keweenaw Bay Indian Community - staff or volunteer participation  
Keweenaw Community Foundation - volunteer participation  
Keweenaw Industrial Council - staff participation (\$2,000)  
Keweenaw Land Trust - volunteer participation (100 hours)  
Keweenaw National Historical Park - staff or advisory commission participation  
Keweenaw Peninsula Chamber of Commerce - staff participation, newsletter inserts to members  
Michigan State University Extension - staff facilitation of meetings and regional planning support (\$5,000)  
The Nature Conservancy, Michigan Chapter (Keweenaw Office) - staff participation (\$1,500)  
Western Upper Peninsula Planning and Development Region - staff participation, GIS support (\$2,000)

We will also work with Michigan Tech's advancement officers to identify prospective funding sources (foundations, alumni, corporations) to continue Forum activities, including projects developed by the steering committee and task forces.

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**Description of Collaboration/Community Based Support:**

In addition to the partners mentioned under funding sources, the League of Women Voters of the Copper Country has expressed interest in task force participation. Representatives of other groups, such as the Torch Lake PAC, Western U.P. Heritage Trail Network, Otter/Sturgeon River Watershed Council, Copper Country Audubon Club, Lake Superior Binational Program, and outdoor sports clubs will be encouraged to participate as task force members. The Sustainable Future Forum coordinator will look for opportunities to collaborate with these groups. Staff from agencies, such as conservation districts, and the Michigan Departments of Natural Resources and Environmental Quality, will be involved as either task force members or presenters/consultants to the task forces.